

Titles of most frequently occurring classifications of patents returned  
from a search of 10587241 on Mar 25, 2009

18 704/260 (14 OR, 4 XR)  
Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,  
LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION  
704/200 . SPEECH SIGNAL PROCESSING  
704/258 .. Synthesis  
704/260 ... Image to speech

10 704/258 (5 OR, 5 XR)  
Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,  
LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION  
704/200 . SPEECH SIGNAL PROCESSING  
704/258 .. Synthesis

5 704/E13.004 (0 OR, 5 XR)  
Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,  
LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION  
704/E13.001 . SPEECH SYNTHESIS; TEXT TO SPEECH SYSTEMS (EPO)  
704/E13.002 .. Methods for producing synthetic speech; speech  
synthesizers (EPO)  
704/E13.004 ... Sound editing, manipulating voice of the synthesizer  
(EPO)

5 704/219 (1 OR, 4 XR)  
Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,  
LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION  
704/200 . SPEECH SIGNAL PROCESSING  
704/201 .. For storage or transmission  
704/219 ... Linear prediction

5 704/270 (0 OR, 5 XR)  
Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,  
LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION  
704/200 . SPEECH SIGNAL PROCESSING  
704/270 .. Application

4 704/E13.011 (0 OR, 4 XR)  
Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,  
LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION  
704/E13.001 . SPEECH SYNTHESIS; TEXT TO SPEECH SYSTEMS (EPO)  
704/E13.011 .. Text analysis, generation of parameters for speech  
synthesis out of text, e.g., grapheme to phoneme translation, prosody generation,  
stress, or intonation determination, etc. (EPO)

4 704/268 (1 OR, 3 XR)  
Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,  
LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION  
704/200 . SPEECH SIGNAL PROCESSING  
704/258 .. Synthesis  
704/268 ... Frequency element

4 704/E13.013 (0 OR, 4 XR)  
Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,  
LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION  
704/E13.001 . SPEECH SYNTHESIS; TEXT TO SPEECH SYSTEMS (EPO)  
704/E13.011 .. Text analysis, generation of parameters for speech  
synthesis out of text, e.g., grapheme to phoneme translation, prosody generation,  
stress, or intonation determination, etc. (EPO)  
704/E13.013 ... Prosody rules derived from text (EPO)

- 4 704/ 262 (0 OR, 4 XR)  
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,  
 LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/ DECOMPRESSION  
 704/ 200 . SPEECH SIGNAL PROCESSING  
 704/ 258 .. Synthesis  
 704/ 262 ... Linear prediction
- 4 704/ 223 (0 OR, 4 XR)  
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,  
 LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/ DECOMPRESSION  
 704/ 200 . SPEECH SIGNAL PROCESSING  
 704/ 201 .. For storage or transmission  
 704/ 221 ... Pattern matching vocoders  
 704/ 223 .... Excitation patterns
- 4 704/ E13.008 (0 OR, 4 XR)  
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,  
 LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/ DECOMPRESSION  
 704/ E13.001 . SPEECH SYNTHESIS; TEXT TO SPEECH SYSTEMS (EPO)  
 704/ E13.005 .. Details of speech synthesis systems, e.g., synthesizer  
 architecture, memory management, etc. (EPO)  
 704/ E13.008 ... Systems using speech synthesizers (EPO)
- 3 704/ 200 (3 OR, 0 XR)  
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,  
 LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/ DECOMPRESSION  
 704/ 200 . SPEECH SIGNAL PROCESSING
- 3 704/ E19.02 (0 OR, 3 XR)  
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,  
 LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/ DECOMPRESSION  
 704/ E19.001 . SPEECH OR AUDIO SIGNAL ANALYSIS- SYNTHESIS TECHNIQUES FOR  
 REDUNDANCY REDUCTION, E.G., IN VOCODERS, ETC.; CODING OR DECODING OF SPEECH OR AUDIO  
 SIGNALS; COMPRESSION OR EXPANSION OF SPEECH OR AUDIO SIGNALS, E.G., SOURCE-FILTER  
 MODELS, PSYCHOACOUSTIC ANALYSIS, ETC. (EPO)  
 704/ E19.01 .. Using spectral analysis, e.g., transform vocoders, subband  
 vocoders, perceptual audio coders, psychoacoustically based lossy encoding, etc.,  
 e.g., MPEG audio, Dolby AC-3, etc. (EPO)  
 704/ E19.02 ... Using orthogonal transformation (EPO)
- 3 704/ 220 (2 OR, 1 XR)  
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,  
 LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/ DECOMPRESSION  
 704/ 200 . SPEECH SIGNAL PROCESSING  
 704/ 201 .. For storage or transmission  
 704/ 220 ... Analysis by synthesis
- 3 704/ 266 (1 OR, 2 XR)  
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,  
 LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/ DECOMPRESSION  
 704/ 200 . SPEECH SIGNAL PROCESSING  
 704/ 258 .. Synthesis  
 704/ 266 ... Specialized model
- 3 704/ 264 (3 OR, 0 XR)  
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,  
 LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/ DECOMPRESSION  
 704/ 200 . SPEECH SIGNAL PROCESSING  
 704/ 258 .. Synthesis  
 704/ 264 ... Excitation
- 3 704/ E13.007 (0 OR, 3 XR)  
 Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,

LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION

704/E13.001 . SPEECH SYNTHESIS; TEXT TO SPEECH SYSTEMS (EPO)

704/E13.005 .. Details of speech synthesis systems, e.g., synthesizer architecture, memory management, etc. (EPO)

704/E13.007 ... Excitation (EPO)

3 704/E13.009 (0 OR, 3 XR)

Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION

704/E13.001 . SPEECH SYNTHESIS; TEXT TO SPEECH SYSTEMS (EPO)

704/E13.009 .. Elementary speech units used in speech synthesizers; concatenation rules (EPO)

3 704/267 (0 OR, 3 XR)

Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION

704/200 . SPEECH SIGNAL PROCESSING

704/258 .. Synthesis

704/267 ... Time element

3 704/E13.003 (0 OR, 3 XR)

Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION

704/E13.001 . SPEECH SYNTHESIS; TEXT TO SPEECH SYSTEMS (EPO)

704/E13.002 .. Methods for producing synthetic speech; speech synthesizers (EPO)

704/E13.003 ... Concept-to-speech synthesizers; generation of natural phrases not from text but from machine-based concepts (EPO)

2 704/200.1 (1 OR, 1 XR)

Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION

704/200 . SPEECH SIGNAL PROCESSING

704/200.1 .. Psychoacoustic

2 704/E19.035 (0 OR, 2 XR)

Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION

704/E19.001 . SPEECH OR AUDIO SIGNAL ANALYSIS-SYNTHESIS TECHNIQUES FOR REDUNDANCY REDUCTION, E.G., IN VOCODERS, ETC.; CODING OR DECODING OF SPEECH OR AUDIO SIGNALS; COMPRESSION OR EXPANSION OF SPEECH OR AUDIO SIGNALS, E.G., SOURCE-FILTER MODELS, PSYCHOACOUSTIC ANALYSIS, ETC. (EPO)

704/E19.023 .. Using predictive techniques; codecs based on source-filter modelization (EPO)

704/E19.026 ... Determination or coding of the excitation function; determination or coding of the long-term prediction characteristics (EPO)

704/E19.035 .... Determination or coding of a code excitation; code excited linear prediction (CELP) vocoders (EPO)

2 704/E13.012 (0 OR, 2 XR)

Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION

704/E13.001 . SPEECH SYNTHESIS; TEXT TO SPEECH SYSTEMS (EPO)

704/E13.011 .. Text analysis, generation of parameters for speech synthesis out of text, e.g., grapheme to phoneme translation, prosody generation, stress, or intonation determination, etc. (EPO)

704/E13.012 ... Grapheme to phoneme, detection of language (EPO)

2 704/203 (1 OR, 1 XR)

Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION

704/200 . SPEECH SIGNAL PROCESSING

704/201 .. For storage or transmission

704/ 203 . . . Transf or mat i on

2 704/ 222 (1 OR, 1 XR)

Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,  
LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION

704/ 200 . SPEECH SIGNAL PROCESSING

704/ 201 . . For storage or transmission

704/ 221 . . . Pattern matching vocoders

704/ 222 . . . . Vector quantization

2 704/ E19. 041 (0 OR, 2 XR)

Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,  
LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION

704/ E19. 001 . SPEECH OR AUDIO SIGNAL ANALYSIS- SYNTHESIS TECHNIQUES FOR  
REDUNDANCY REDUCTION, E. G., IN VOCODERS, ETC.; CODING OR DECODING OF SPEECH OR AUDIO  
SIGNALS; COMPRESSION OR EXPANSION OF SPEECH OR AUDIO SIGNALS, E. G., SOURCE-FILTER  
MODELS, PSYCHOACOUSTIC ANALYSIS, ETC. (EPO)

704/ E19. 023 . . Using predictive techniques; codecs based on source-filter  
modelization (EPO)

704/ E19. 039 . . . Details of speech and audio coders (EPO)

704/ E19. 04 . . . . Vocoder architecture (EPO)

704/ E19. 041 . . . . . Vcoders using multiple modes (EPO)

2 704/ 265 (1 OR, 1 XR)

Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,  
LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION

704/ 200 . SPEECH SIGNAL PROCESSING

704/ 258 . . Synthesis

704/ 265 . . . Interpolation

2 704/ 218 (1 OR, 1 XR)

Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,  
LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION

704/ 200 . SPEECH SIGNAL PROCESSING

704/ 201 . . For storage or transmission

704/ 211 . . . Time

704/ 216 . . . . Correlation function

704/ 218 . . . . . Cross-correlation

2 704/ 221 (0 OR, 2 XR)

Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,  
LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION

704/ 200 . SPEECH SIGNAL PROCESSING

704/ 201 . . For storage or transmission

704/ 221 . . . Pattern matching vocoders

2 704/ 235 (0 OR, 2 XR)

Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,  
LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION

704/ 200 . SPEECH SIGNAL PROCESSING

704/ 231 . . Recognition

704/ 235 . . . Speech to image

2 704/ 261 (1 OR, 1 XR)

Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,  
LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION

704/ 200 . SPEECH SIGNAL PROCESSING

704/ 258 . . Synthesis

704/ 261 . . . Vocal tract model

2 704/ E13. 002 (0 OR, 2 XR)

Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,  
LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION

704/ E13. 001 . SPEECH SYNTHESIS; TEXT TO SPEECH SYSTEMS ( EPO)  
704/ E13. 002 ..Methods for producing synthetic speech; speech  
synthesizers ( EPO)

2 704/ 500 (2 OR, 0 XR)  
Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,  
LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/ DECOMPRESSION  
704/ 500 . AUDIO SIGNAL BANDWIDTH COMPRESSION OR EXPANSION

2 704/ E21. 011 (0 OR, 2 XR)  
Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,  
LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/ DECOMPRESSION  
704/ E21. 001 . MODIFICATION OF AT LEAST ONE CHARACTERISTIC OF SPEECH WAVES  
( EPO)  
704/ E21. 002 ..Speech enhancement, e.g., noise reduction, echo  
cancellation, etc. ( EPO)  
704/ E21. 003 ...Applications ( EPO)  
704/ E21. 009 ....Enhancement of intelligibility of clean or coded speech  
( EPO)  
704/ E21. 011 .....Bandwidth extension taking place at the receiving side,  
e.g., generation of low- or high-frequency components, regeneration of spectral  
holes, etc. ( EPO)

2 704/ E13. 006 (0 OR, 2 XR)  
Class 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,  
LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/ DECOMPRESSION  
704/ E13. 001 . SPEECH SYNTHESIS; TEXT TO SPEECH SYSTEMS ( EPO)  
704/ E13. 005 ..Details of speech synthesis systems, e.g., synthesizer  
architecture, memory management, etc. ( EPO)  
704/ E13. 006 ...Architecture of speech synthesizers ( EPO)

2 455/ 66. 1 (1 OR, 1 XR)  
Class 455 TELECOMMUNICATIONS  
455/ 39 . TRANSMITTER AND RECEIVER AT SEPARATE STATIONS  
455/ 66. 1 ..Having diverse art device

2 707/ E17. 009 (0 OR, 2 XR)  
Class 707 DATA PROCESSING: DATABASE AND FILE MANAGEMENT OR DATA  
STRUCTURES  
707/ E17. 001 . INFORMATION RETRIEVAL; DATABASE STRUCTURES THEREFORE ( EPO)  
707/ E17. 009 ..Information processing systems, e.g., multimedia systems,  
etc. ( EPO)